CPC COOPERATIVE PATENT CLASSIFICATION

H ELECTRICITY

(NOTE omitted)

H05 ELECTRIC TECHNIQUES NOT OTHERWISE PROVIDED FOR

H05G X-RAY TECHNIQUE (investigating or analysing materials by the use of X-rays <u>G01N 23/00</u>; apparatus for X-ray photography <u>G03B 42/02</u>; X-ray tubes <u>H01J 35/00</u>; TV systems having X-ray input <u>H04N 5/321</u>)

WARNINGS

 The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups: H05G 1/61
 covered by
 H05G 1/60

 H05G 1/61
 covered by
 H05G 1/60

 2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

1/00	X-ray apparatus involving X-ray tubes; Circuits
1/00	therefor
1/02	Constructional details
1/025	• • {Means for cooling the X-ray tube or the generator}
1/04	• • Mounting the X-ray tube within a closed housing
1/06	X-ray tube and at least part of the power supply apparatus being mounted within the same housing
1/08	• Electrical details
1/085	• • {Circuit arrangements particularly adapted for X- ray tubes having a control grid}
1/10	• Power supply arrangements for feeding the X-ray tube {(supply circuits with converters in general <u>H02M</u> ; supply circuits for emitters and amplifiers <u>H04B 1/16</u> - <u>H04B 1/1623</u>)}
1/12	• • • with dc or rectified single-phase ac {or double- phase}
1/14	• • • with single-phase low-frequency ac {also when a rectifer element is in series with the X-ray tube}
1/16	Reducing the peak-inverse voltage
1/18	• • • with polyphase ac of low frequency {rectified}
1/20	• • • with high-frequency ac; with pulse trains {(pulse generators in general <u>H03K 3/00</u> , <u>H03K 4/00</u>)}
1/22	• • • with single pulses
1/24	• • • Obtaining pulses by using energy storage devices
1/26	• Measuring, controlling or protecting (measuring X-ray radiation <u>G01T</u>)
1/265	• • • {Measurements of current, voltage or power}
1/28	• • • Measuring or recording actual exposure time; Counting number of exposures; Measuring required exposure time
1/30	Controlling
1/32	Supply voltage of the X-ray apparatus or tube
1/34	• • • Anode current, heater current or heater voltage of X-ray tube

1/36	Temperature of anode; Brightness of image
	{power (electrical temperature regulating in
	general <u>G05D 23/19</u>)}
1/38	Exposure time {(time switches in general
	H01H 43/00 and subgroups)}
1/40	• • • • • using adjustable time-switch
1/42	• • • • • using arrangements for switching when a
	predetermined dose of radiation has been
	applied, e.g. in which the switching instant is determined by measuring the electrical
	energy supplied to the tube
1/44	••••••• in which the switching instant is
1/44	determined by measuring the amount of
	radiation directly {(dosimetry in general
	<u>G01T 1/02</u>)}
1/46	Combined control of different quantities, e.g.
	exposure time as well as voltage or current
1/48	Compensating the voltage drop occurring at
	the instant of switching-on of the apparatus
1/50	Passing the tube current only during a
	restricted portion of the voltage waveform
1/52	Target size or shape; Direction of electron
	beam, e.g. in tubes with one anode and more
1/54	than one cathode \mathbf{P}
1/54	• Protecting {or lifetime prediction}(overload protection combined with control H05G 1/46)
1/56	Switching-on; Switching-off
1/58	 Switching-on; Switching-on Switching arrangements for changing-over from
1/38	one mode of operation to another, e.g. from
	radioscopy to radiography, from radioscopy to
	irradiation {or from one tube voltage to another}
1/60	• Circuit arrangements for obtaining a series of X-
	ray photographs or for X-ray cinematography
1/62	. Circuit arrangements for obtaining X-ray
	photography at predetermined instants in the
	movement of an object, e.g. X-ray stroboscopy
1/64	. Circuit arrangements for X-ray apparatus
	incorporating image intensifiers
1/66	. Circuit arrangements for X-ray tubes with target
1/69	movable relatively to the anode
1/68	• Circuit arrangements for Lilienfield tubes; Circuit arrangements for gas-filled X-ray tubes
	attailgements for gas-filled A-ray tubes

H05G

1/70 . Circuit arrangements for X-ray tubes with more than one anode; Circuit arrangements for apparatus comprising more than one X ray tube {or more than one cathode (<u>H05G 1/58</u> takes precedence)}

2/00	Apparatus or processes specially adapted for	
	producing X-rays, not involving X-ray tubes, e.g. involving generation of a plasma (X-ray lasers	•
	<u>H01S 4/00</u>)	

- 2/001 {X-ray radiation generated from plasma (plasma for generation of electrons to be accelerated towards an anode H01J 35/00)}
- 2/003 . . {being produced from a liquid or gas}
- 2/005 . . . {containing a metal as principal radiation generating component}
- 2/006 . . . {details of the ejection system, e.g. constructional details of the nozzle}
- 2/008 . . {involving a beam of energy, e.g. laser or electron beam in the process of exciting the plasma}